(19) World Intellectual Property Organization International Bureau



(43) International Publication Date 14 July 2005 (14.07,2005)

PCT

(10) International Publication Number WO 2005/063449 A1

(51) International Patent Classification?: B25C 1/08, 1/14

(21) International Application Number:

PC17/AU2004/001836

(22) International Filing Date:

30 December 2004 (30.12.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:
2003907160 30 December 2003 (30.12.2003) AtJ
2004900539 4 February 2004 (04.02.2004) AU

- (71) Applicant (for all designated States except US): POLY SYSTEMS PTY LTY [AU/AU]; Main Road, George Town, TAS 7253 (AU).
- (72) Inventor; and
- (75) Inventor/Applicant (for US only): WEBB, Roger, Clyde [AU/AU]; Main Road, George Town, TAS 7253 (AU).
- (74) Agent: HODGKINSON MCINNES PAPPAS; Level 3, 20 Alfred Street, Milsons Point, NSW 2061 (AU).

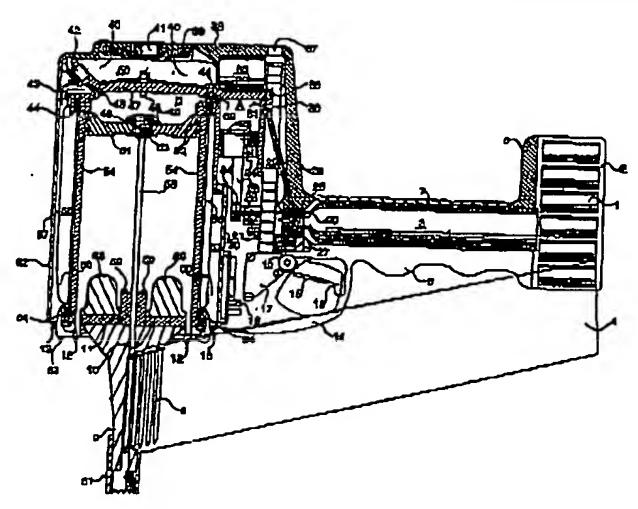
- (81) Designated States (unless otherwise indicated, for every kind of national protection uvailable): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, BC, EE, EG, ES, FL, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise Indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, FH, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SL, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guldance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazene.

(54) Title: FASTENER DRIVING TOOL



(57) Abstract: A fastener driving tool comprising: a tool nose through which a fastener is fired; loading means for introducing the fastener into the tool nose. The fastener is adapted to be propelled by a gas combustion mechanism comprising a first priming cylinder (A) having a first piston (24) and an air intake (31) fluidally connected via a first valve means (32) to a second delivery cylinder (B) having a second piston (51). The first priming cylinder fluidally connected to a fuel gas reservoir (3) via a second valve means (26), the first priming cylinder adapted to receive fuel from the reservoir and air through the air intake thereby forming an air/fuel gas mixture therein. The first piston adapted to compress the air/fuel gas mixture and transfer same to the second deliver cylinder via said first valve means, the air/fuel mixture ignited therein and thereby urging the second piston towards the fastener and propelling same away from the tool nose.